Developing a Community-Based Tourism Model for Sustainable Tourism in the Mandeh Area, West Sumatra Province, Indonesia

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ABSTRACT

This research departs from several fundamental issues related to community-based tourism development in Mandeh. The information that emerged regarding the slow development of the Mandeh at this time was due to several stakeholders still trapped in the paradigm and short-term mindset in tourism management. Furthermore, the problem that was also found was that a community-based tourism development program that was oriented towards sustainable development had not been designed. Therefore, this study aims to develop and test the community-based tourism model in Mandeh. The research used qualitative methods with data analysis techniques using the CAQDA Software-NVivo. The results showed that building community-based tourism must start by strengthening the community and the community development dimension. From the model test, it can be concluded that from the analysis of stakeholder answers, it can be stated that they accept the model being tested because it is relevant to the dynamics and problems faced in the development of community-based tourism in Mandeh. The results of this research imply that stakeholders can use this model to design a pattern of community-based tourism development that is more sustainable in the future.

1. INTRODUCTION

Currently, in Indonesia, the development of tourist travel trends is marked by the emergence of motivation and patterns of new tourist trips carried out by tourists, especially in the mature and experienced tourist market segment (mature market), and those who are educated and have a high level of education-deep concern for environmental conservation issues and empowerment of local communities and cultures [1]. The changes in question are related to changes in the trend of motivation and patterns of tourist travel, namely from mass tourism to alternative tourism. This is a form of balancing against the development of mass tourism, which is so rapid and is seen as less friendly to the environment and less pro-local communities [2].

Pariwisata [2] also explained that alternative forms of tourism include adventure tourism, hiking, trekking, bird watching, wildlife viewing, rural tourism, etc. Alternative tourism activities must be an essential concern in developing tourist attractions in Indonesia, especially those related to cultural diversity and natural uniqueness. The alternative is considered very strategic to address several agendas in tourism development. And this impacts community-focused tourism development as one of the current priority agendas.

The impact of tourism development related to social and cultural aspects is very influential on the life of the local community. Therefore, involving local communities in developing sustainable tourism to reduce adverse effects is essential. The form of community involvement in tourism development in a sustainable manner can be seen with community-based tourism, which means how to mainstream the local community/community as the leading tourism actors by displaying the uniqueness of local norms and wisdom.

According to Purmada et al. [3], community-based tourism emerged as a criticism of tourism management without involving the community. Purmada et al. [3] also explained that community-based tourism as a form of sustainable tourism must prioritize tourism governance that consists of the community as an active subject, improving welfare and protecting sociocultural life and the environment. A tourism development approach that places the community as an inseparable part of tourism products and the understanding that tourism products are the essence of community-based development.

Some principles that can be used in developing community-based tourism are as follows: 1) recognizing community ownership in the tourism industry; 2) community involvement in every tourism activity; 3) the emergence of a sense of pride in tourism by the community; 3) improve the community's quality of life; 4) environmental preservation; 5) preserving the uniqueness and characteristics of local culture; 6) good cultural exchange in the community; 7) respect and appreciation for the culture and dignity of the community; 8) fair distribution of benefits to the community [4].

As one of the tourist destinations in West Sumatra Province, Mandeh plans to become a leading national and even

international destination; it has only been active since 2014. Based on data from the local Tourism Office, Mandeh tourist visits have continued to increase over the past few years. In 2014, data were not yet available at the local tourism office; in 2015, as many as 25,000 visits, and in 2016 soared to 60,000 trips [5]. Most of the visiting tourists come from domestic tourists and foreign tourists. The Mandeh Area has several identified potential community-based tourism products. Based on the initial survey conducted by Zefnihan and Alhadi [6], several forms of tourism products are offered in the Mandeh Area, including Natural Panorama, Tour Boats, Culinary, Homestay, Special Interest Tourism, and Souvenirs. This research also mapped that of all the tourism product categories above, and only the Natural Panorama Products reached the excellent type. Meanwhile, other tourism products have been exceptionally well: Homestay, Special Interest Tourism, Tour Boat, Culinary, and Souvenirs.

Initial observations found several obstacles to developing this community-based tourism: the lack of readiness of stakeholders to support tourism development in the Mandeh Area, namely from the local government, business world, and society. No measurable policy has been implemented in the Mandeh Area from the local government side, especially in the existing Nagari as the basis for developing community-based tourism. Meanwhile, investors from the business side have no serious interest in investing in tourism development in the Mandeh Area by cooperating with local communities. And from the community side, there is no openness standard and providing the best quality service to tourists.

Based on initial observations, the information that emerged regarding the slow development of the Mandeh Area at this time was due to several stakeholders still trapped in the paradigm and short-term mindset in tourism management. Many development efforts that sometimes do not consider environmental sustainability, such as destroying coral reefs, mangrove destruction, and tree felling, prove that natural development is still not focused on sustainable tourism development. Furthermore, the problem that was also found was that a community-based tourism development policy/program that was oriented towards sustainable development in the Mandeh Area had not been designed. And based on initial observations, it was found that the local community had not received assistance and empowerment activities to develop tourism sustainably from other stakeholders. So that until now, there has been no collaboration between the government, the business world, and the community, and as a result, the advantages of the Mandeh Area have not been seen as a potential tourist destination [6].

This is exacerbated by environmental damage at tourist sites as a result of the behavior of tourists and the community, making efforts to develop community-based tourism based on sustainability still a crucial problem to overcome. Based on the results of initial observations, there was damage to the coral reef ecosystem due to mass tourism activities that paid little attention to conservation sustainability. Therefore, the local community's challenge to make tourism a means to improve welfare is increasingly difficult to achieve.

The research findings presented by Prabhakaran et al. [7] focus more on developing community-based tourism, divided into direct and indirect communities. Both communities contribute to the development of community-based tourism. Meanwhile, Falak et al.'s [8] research looks at the perspective of tourism development from a behavioral perspective,

including the social dimension. This means that this research focuses on tourism development from the social aspect, especially behavior change. This differs from the findings in research of Garcia [9], which focuses on the involvement of formal-legal institutions in European tourism development. Here, the main focus is on the government as the leading sector in tourism development, which is the basis for improving people's welfare. Garcia [9] describes the design that forms the basis of tourism development in Southern Europe. In the study of Ratnayake and Kasim [10], there is an element of community participation in tourism development. This community participation focuses on the capacity and commitment of the community itself to produce a positive attitude for the advancement of tourism. It is hoped that with this positive attitude, the community can be empowered and become more independent in tourism and improve their living standards. Related to that, Del Chiappa et al. [11] explain an integration between the perceptions and attitudes of local communities with the presence of external investors in tourism planning and development. The community believes that tourism planning and development must focus on the community and its sociocultural traditions. Furthermore, Tolkach and King [12] explain that his research considers social and economic perspectives in community development when applying future community-based tourism designs in settings in developing countries that depend on natural resources. According to this study, the success of community-based tourism development depends on authoritative funding bodies and communication between managers and stakeholders that maintain a balance of authority.

Meanwhile, this research focuses on integrating relevant stakeholders in developing community-based tourism in the Mandeh Area. Integration is crucial and is a novelty in this research because, in the development of community-based tourism, the involvement of stakeholders must be fully interpreted. The community cannot run alone without the government's support, the business world/investors, visitors, activists, and netizens. With the involvement of these stakeholders in the development of community-based tourism in the Mandeh Area, environmental sustainability, economic welfare, and respect for local sociocultural norms and values will be achieved.

For this reason, this research aims to develop community-based tourism in the Mandeh Region, which integrates three main concepts: the community descriptor dimension, and the descriptor dimension of sustainable tourism development. This three-dimensional integration is a novelty compared to the concepts produced in previous research, so it is hoped that it can provide new ideas for developing community-based tourism in Indonesia.

2. LITERATURE REVIEW

Community-based tourism is where many residents have substantial control over involvement in developing and managing tourism. Tourism is operated and owned by the community, for the community, to increase tourists' awareness of the community and how they live [13]. Hatton in Telfer and Sharpley [14] state that the first goal of community-based tourism is respect for local culture, heritage, and ancestral values. Community-based tourism is seen as a tool to strengthen and save traditional lifestyles-respect for natural heritage where the environment becomes part of the tourist

attraction. The second aim of community-based tourism is that tourism activities are developed and operated by the majority of members of the local community. Income and income go directly to residents, not local governments, elite groups, or other outside groups exploiting local communities. Through greater local control and by integrating tourism into the local economy using local labor and resources, it is likely that community members will achieve greater empowerment and self-reliance.

Measuring community-based tourism's success is tricky because it includes various variables and qualities. However, by exploring the concepts of community-based tourism from experts, it can be identified that it is said to be successful if it positively impacts the local population's social, economic, and environmental conditions. Community-based tourism is said to be good if tourists provide benefits to the host community in the tourist area. According to Asker et al. [15] community-based tourism success has three dimensions: social, economic, and environmental.

Community-based tourism is intended as a tool for community development and conservation of nature and culture. So research on this matter includes holistic community development, sustainable development, sustainable tourism, and community-based tourism, including; social, economic, and environmental development in the context of the success of community-based tourism. The description above implies that community-based tourism is tourism whose development, ownership, and management involve the local community to improve a better life for all community members and conserve nature and culture towards sustainable tourism. Community involvement in a tourism activity can be voluntary or involuntary. Communities can become the main tourist attraction as representatives of local knowledge and culture or can only be used as a show during tourist visits. Communities are involved in tourism not only to meet the need for increased awareness and learning about the community and their lives but also to increase the community's contribution to tourism management locally [14].

Tourism activity can have a positive or negative impact on the local community. Irresponsible tourism development in practice can degrade local habitats and natural resources. On the other hand, sustainable tourism development can support the conservation of cultural and natural heritage and create awareness of their impact on communities and the environment [16]. Community-based tourism development became popular in the mid-1990s, with the top-down development approach turning upside down into a bottom-up development approach [17].

In developing and organizing tourism activities, residents are the owners and decision-makers for tourism management to benefit and benefit the local community. They support efforts to preserve cultural heritage and natural resources and are concerned about the impact of tourism on their lives and the environment. Residents earn income as owners, entrepreneurs, and providers of tourism products and services. Generally, they set aside some of the profits from tourism activities for projects and ideas that benefit the community [17].

As it is understood, mass conventional tourism negatively impacts natural resources and residents, who rarely enjoy the benefits. Community-based tourism is an alternative form of tourism that focuses on the maximum profit for investors and pays attention to the impact of tourism on the environment and residents. Suppose the concept of community-based tourism is applied correctly. In that case, these tourism activities will not only help residents control the impact of tourism but also create additional income and diversify the local economy [18].

Community-based tourism has many benefits, such as creating awareness and developing management skills, encouraging environmental planning, and managing environmental issues. Local governments sometimes use residents and tourists as eyes and ears in environmental protection. Preservation of local culture is also another benefit of having community-based tourism activities. If residents understand the high value of their traditions and culture, local wisdom and knowledge can be passed on from one generation to the next. Besides that, cooperation with local governments and private investors, direct contact with tourists, and improving the quality of life are other benefits of community-based tourism.

Furthermore, the money earned from community-based tourism activities can improve local people's health and education levels, alleviate poverty, and solve land distribution problems. In addition, community-based tourism activities have the potential to decentralize the tourism industry by shifting decision-making processes at the local community level, which will lead to community empowerment and the building of local-level institutions, with a sense of belonging, strengthening community identity and a sense of pride as local community members.

Next, to find out the position of this research, the relevant research and articles will be described as follows:

a. In this study [7], the author will integrate the netizen community and environmental activists as part of the collaboration process between stakeholders in developing community-based tourism in the Mandeh Tourism Area. The difference with Prabharakan's research is that this research does not separate direct and indirect communities but as stakeholders. Furthermore, what is meant by the community in this research is the local community (tourist actors). Meanwhile, the other stakeholders are the business world, the government, and visitors, who can also play the role of netizens. Collaboration between stakeholders plays a role in developing community-based tourism that aims to balance tourism destinations from economic, social, and environmental perspectives.

b. In this study [8], the author looks at the role of stakeholders in developing community-based tourism in the Mandeh Area. The stakeholders are the local community and other stakeholders such as the local government, the business world, environmental activists, and netizens. The difference with Falak's research is the emphasis on community-based tourism development in Mandeh, which focuses on economic, social, and environmental aspects.

c. This this study [9], carried out in developing community-based tourism in Kawa-san Mandeh, ensures the improvement of community welfare and environmental conservation. This research not only departs from the role of formal institutions in tourism development but also focuses on community involvement in developing tourism. Tourism development in this study aims to balance economic, social, and environmental aspects.

d. In this study [10], the author also analyzes how the community involved in developing community-based

tourism in the Mandeh Area does not only focus on improving living standards but also on how to increase community capacity and commitment to preserving sustainability. Environment as part of tourism activities. Also of concern in this research is the involvement of other stakeholders, such as the government, the business world, visitors, and netizens, in developing sustainable community-based tourism.

e. In this study [11], the authors consider the local community developing community-based tourism in Kawa-san Mandeh and other stakeholders who can also have a significant role. This study examines investors' (business world) role in tourism development. It emphasizes community development as the leading subject/actor of tourism in the Mandeh Area. Collaboration between stakeholders becomes essential in developing sustainable tourism that focuses on economic, social, and environmental aspects.

f. This research [12] also looks at the importance of government and business support as a source of funding assistance and community capacity building. But the difference is in looking at dependence on external parties to local communities. The relationship that will be prioritized is a mutually beneficial relationship between stakeholders and not reliance on only one party in the development of community-based tourism. Collaboration between each stakeholder is needed in developing sustainable tourism. The design of this research will also consider the integrated role of each stakeholder in developing community-based tourism in the Mandeh Area.

3. METHODOLOGY

This research uses the research and development method (Research and Development/R & D) and qualitative data analysis with the post-positivism paradigm. The research location is in the Mandeh Area, Pesisir Selatan Regency, West Sumatra Province. With a purposive procedure, the informants in this study are all stakeholders in the development of the Mandeh tourism area. In this study, the sources selected by stakeholders related to the development of the community-based Mandeh tourism area can be seen in Table 1 below:

Table 1. Informants and data requirements

No	Informant	Data Requirements	Information
1	Stakeholders related to the Department of Tourism	The tourism development plan, policy direction, SOP, guidance, and assistance in the Mandeh Area	a) Head of Tourism Office b) Tourism Promotion Section c) Tourism Destinations Section
2	Relevant Stakeholders in the Provincial/District Office of Public Works	Plans to develop tourism infrastructure in the Mandeh Area	Head of the South Coast Public Works Service
3	Relevant stakeholders the Department of Fisheries	Coastal area management data	a) Head of the South Coastal Fisheries Service b) Secretary of the Department of Fisheries
4	Stakeholders related to the Department of the Environment	Environmental Impact Analysis data in the Mandeh Area and data on protected areas	Head of the Environment Service
5	Local Village Government	Data on participation, understanding, and management of Nagari in the development of community-based tourism in the Mandeh Region	a) Head of Mandeh Village b) Head of Sungai Nyalo Village c) Head of Sungai Pinang Village d) Chairman of the Mandeh Village Consultative Body e) Chairman of the Sungai Nyalo Village Consultative Body f) Chairman of the Sungai Pinang Village Consultative Body
6	Local Tour Investor/Operator	Data on the role of investors/tour operators in the development and promotion of tourism in the Mandeh Area	Tourism Business Owner in Mandeh
7	Local community leaders	Data on participation, understanding, and management by local communities in the development of community-based tourism in the Mandeh Region	Local Community Figures
8	Local Tourism Awareness Group	Data on participation, understanding, and management by local communities in the development of community-based tourism in the Mandeh Region	Chair and Members of the Tourism Awareness Group
9	Local Business Actors/Managers	Data on business forms and business development plans related to community-based tourism	Culinary/Souvenir Traders and Business Owners
10	Tourism Activist/Environmental Activist	Data on the participation of Netizens/Tourism Activists/Environmental activists in the development of community-based tourism in the Mandeh Region	Tourism Activist Figure and Environmental Activist

Collecting data in qualitative descriptive research is no different from conducting quantitative research, namely preparing a research schedule and budgeting, including data collection in the field. Data collection techniques are the main steps in research because the study aims to get data. Researchers can obtain data that meets established standards by understanding data collection techniques. Sugiyono [19] explains that in qualitative research, data collection is carried out in natural settings, primary data sources, and data collection techniques involve participant observation, in-depth interviews, and documentation.

Meanwhile, FGD, as a method of data collection, requires

dynamic interaction of participants in focus group discussions and is expected to be able to explore and discuss a theme needed by the researcher or the group itself [20]. The FGDs conducted in this study were six times with the following details in Table 2:

Table 2. Details of FGD activities

No	Activity	Participant	Information
1	FGD 1	Regional Apparatus Organization	Research Data Collection
2	FGD 2	Community Leaders, Resort/Homestay Owners, Tourism Activists, Environmental Activists, Academics	Research Data Collection
3	FGD 3	Head and Government Village Officials	Research Data Collection
4	FGD 4	Regional Apparatus Organization	Design Test
5	FGD 5	Community Leaders, Resort/Homestay Owners, Tourism Activists, Environmental Activists, Academics	Design Test
6	FGD 6	Head and Government Village Officials	Design Test

In this study, the interview technique will be used with in-depth interviews with several indicators, namely: 1) general characteristics of the community; 2) the perspective of the success of community-based tourism; 3) Community participation; 4) tourism resources; 5) Community leadership; 6) Community organizations; 6) tourism management, and 6) Possible impacts of tourism which will be followed by a Focus Group Discussion (FGD) to collect data on dynamic interactions of participants in focus groups and hopefully be able to explore and discuss a theme that is needed.

The data analysis technique in this study used the Computer Assisted Qualitative Data Analysis Software (CAQDAS), NVivo 12 Plus, for the coding process. Coding activities are carried out interactively. Researchers from data groups based on information that appears compare ideas and data groups and reintegrate all concepts and data types connected [21]. The coding system is a way to group specific data points and organize information into different groups [22].

4. RESULTS AND DISCUSSION

4.1 Dimensions of community

This community development dimension consists of several descriptors in the community dimension for community-based tourism development in the Mandeh Area. The results of the coding matrix are carried out to obtain trend values for each descriptor, as described in Figure 1.

The community dimension is one of the central dimensions in designing community-based tourism development in the Mandeh Region. Communities are subject to tourism development and should be prioritized with the support of stakeholders to be empowered so that they have good performance in terms of economic welfare, environmental sustainability, and socio-culture. In the first trend, the community dimension is supported by community participation descriptors as presented by Tosun and Wang et al. that High community participation will be more conducive to the evolution of sustainable tourism development [23]. Community descriptors consist of sub-descriptors that are

used as supporting elements in community-based tourism development, namely: (1) evaluation of sustainable tourism activities, (2) increasing community participation in decision-making processes, (3) community involvement in increasing the benefits of tourism in the Mandeh Area. For this reason, it is necessary to increase community participation in developing community-based tourism. Community participation can be increased through various empowerment programs.
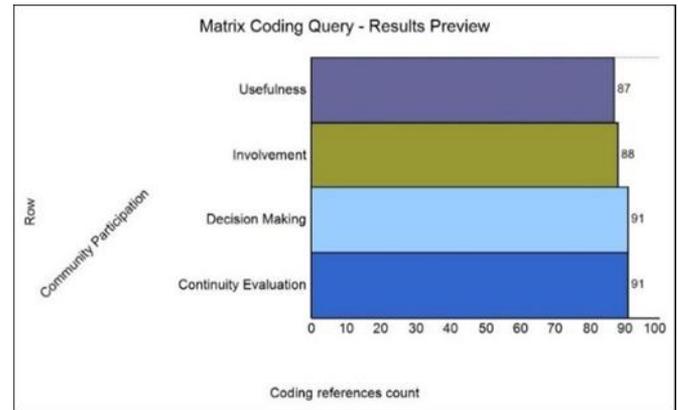

Figure 1. Matrix coding results for dimensions of community

While the next is to make the community leadership descriptor a second element that must be considered in building a community-based tourism development design in the Mandeh Region. As intended, leadership focuses on the characteristics and behavior of individual leaders and their relationship with the community/followers [24]. Community leadership descriptors are divided into sub-descriptors starting sequentially from those that must be considered in the design of community-based tourism development in the Mandeh Region, namely: (1) Increased coordination, (2) Commitment, (3) Transparency, (3) Inspirational leadership, (4) Adequate leadership capacity, (5) Leaders who are problem solvers, (6) Acceptable leaders, (7) Prioritizing persuasive steps and (8) Being accommodative.

And finally, the community dimension, which is an element in the design of community-based tourism development in the Mandeh Region, is a descriptor of community organization that consists of several sub-descriptors sequentially from those that must be considered earlier, namely: (1) organizational capacity, (2) Strong commitment organization, (3) There is a division of roles and functions between members of the organization, (4) having a vision and mission within the organization, (5) improving coordination between stakeholders, (6) availability of organizational resources, (7) having organizational procedures, (8) participation of other stakeholders in strengthening the organization, and (9) adequate number of organizational personnel.

Based on the above, to strengthen the implementation of community-based tourism development in the Mandeh Region, especially the community dimension, it is necessary to start by strengthening the participation descriptor as a new finding in the results of this study before improving other descriptors and sub-descriptors. Furthermore, the community dimension consists of several descriptors that support the development of community-based tourism, namely:

4.1.1 Community participation descriptors
Community participation is one of the descriptors in the community-based tourism development model dimension,

with a tendency from the results of the coding matrix to reach 85 points. The community participation descriptor is one of the bases for developing community-based tourism, which should continue to be improved in its application in the Mandeh Area. Asker et al. [15] stated that community participation in tourism development aims to ensure its members get the benefits and benefits of tourism activities. Therefore, part of the tourism benefits or benefits obtained should be allocated to the entire community and some individuals. Then, the community participation descriptor from the results of the coding matrix analysis of the research findings is shown in Figure 2 below:
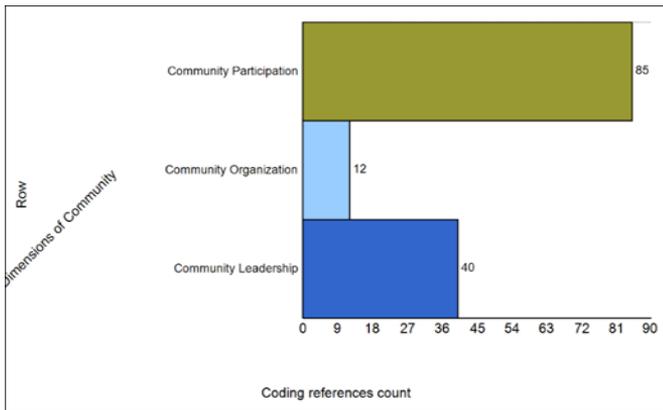
Figure 2. The results of the community participation descriptor coding matrix

In the Mandeh Area community, this sub-descriptor is a priority because, based on the analysis of the research findings, it is found that the community wants to be involved in the decision-making process in community-based tourism development. In this context, it can also be interpreted that the people of the Mandeh Area wish to act as objects actively involved in decision-making, not only as subjects in implementing community-based tourism development policies.

4.1.2 Community leadership descriptor

Next, the analysis of community leadership descriptors on community-based tourism development in the Mandeh Area from the results of the coding matrix reaches 40 points. The descriptor of community leadership is based on analysis using a coding matrix divided into several sub-descriptors as a supporting element. More details can be seen in Figure 3 below:
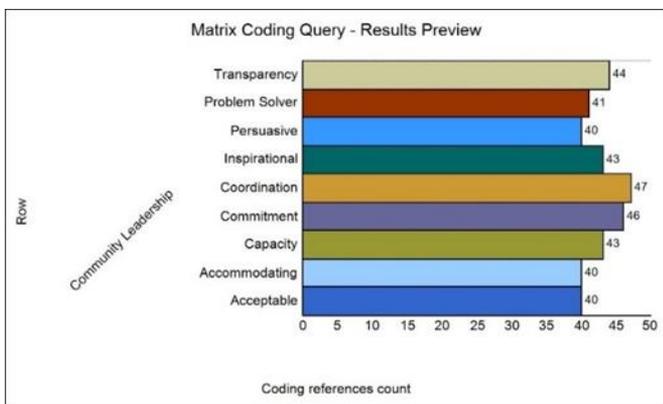

Figure 3. Results of the community leadership descriptor coding matrix

From the results of the coding matrix on the leadership descriptor, the sub-descriptor with the second-highest tendency was a commitment, with impacts reaching 46 points. These results indicate that community leaders in the Mandeh Area must commit to driving community-based tourism. It will motivate and guide other community members to be involved in developing community-based tourism with a strong commitment. This commitment is also evident from the consistency of local community leadership in fighting for community welfare and environmental sustainability.

4.1.3 Community organization descriptors

At the last level in the community dimension is the community organization descriptor, with the results of the coding matrix reaching 12 points based on the analysis of the research findings. The organization in question is a forum to empower the community in developing and managing tourism in the Mandeh Area. Community organizations formed can be based on the legality of the local government in the form of a tourism awareness group (Pokdarwis) or an independent community created on the same ideas and values as people who love coral reef communities that keep the sea clean and other groups. The community organization descriptor is divided into several sub-descriptors with the results of the coding matrix, which can be seen in Figure 4 below:
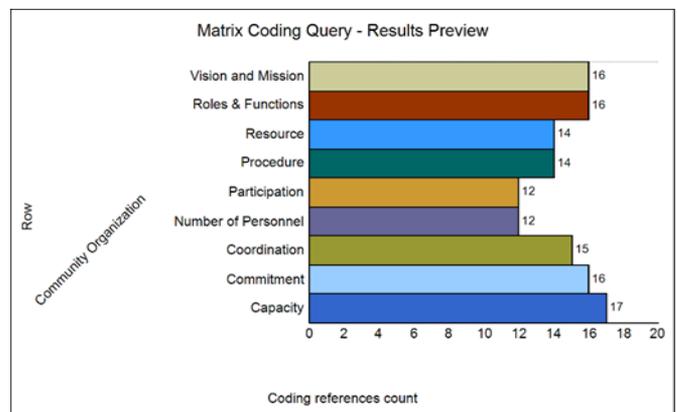

Figure 4. Community organization descriptor coding matrix results

From the results of the coding matrix above, it can be explained that the community organization descriptor is composed of several sub-descriptor elements that get various achievements from the results of the coding matrix that has been carried out. First, the sub-descriptor of organizational capacity achieved the highest marks with 17 points because developing community-based tourism requires adequate community organizational capacity, especially regarding knowledge, skills, ideas, innovation, and commitment possessed by the management of these community organizations. Furthermore, at the second, third, and fourth levels, the sub-descriptor of vision and mission, roles and functions, and organizational commitment obtained the same coding matrix results, with a tendency value of 16 points based on the analysis of the research findings. Therefore, if it wants to develop optimally, an organization must have a measurable vision and mission, which is the basis for its participation, including community organizations in the Mandeh Area. In addition, it must also explain the roles and functions of the community organization in the fields agreed upon by the organization's members so that they are not biased in each of

their activities and focus on organizational goals.

4.1.4 Dimensions of sustainable tourism

According to Sharpley and Telfer [14], the principles of sustainable tourism development include: first, reflecting the values of life and the dynamics of the local community. Second, it generates mutual benefits between local communities and tourists. Third, maintaining authenticity in presenting history, heritage, culture, lifestyle, and local natural resources and fourth, adding value to existing local attributes to offer a more varied tourist experience and support the diversity of the local economy. Fifth, it has different features and is more competitive than other tourist destinations. Sixth, collaborating with businesses and other stakeholders in building local capacity. Seventh, supporting natural resources and wildlife conservation, and eighth, minimizing environmental negative impacts. Furthermore, from the results of the coding matrix on the research findings, the trend value for each descriptor is obtained, which is explained as follows in Figure 5:
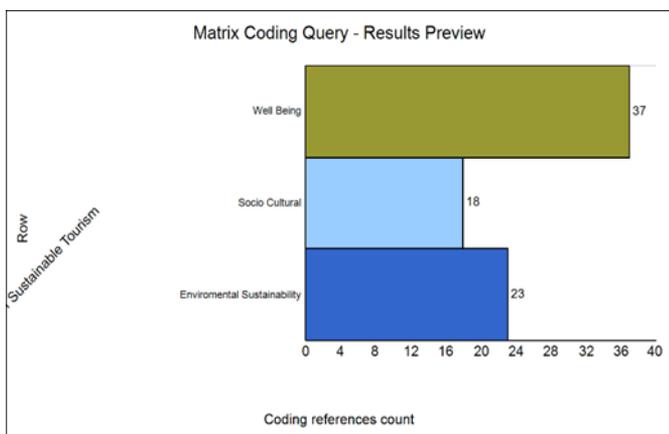

Figure 5. The matrix results for coding the dimensions of sustainable tourism

From the results of the coding matrix above on the research findings, it can be explained that the dimensions of sustainable tourism in community-based tourism development in the Mandeh Area are determined by several descriptors with high to low driving trends as follows:

4.1.5 Community welfare descriptor

Community welfare is the main foundation of community-based tourism development. Purmada et al. [3] stated, sustainable tourism must prioritize tourism governance that involves the community as an active subject, improving welfare and protecting sociocultural life and the environment. In the Mandeh Area, community welfare is one of the motivators for the community to be involved in the tourism sector alongside other sectors such as agriculture and capture fisheries or cultivation. The element of welfare obtained from community-based tourism development is the main attraction. Many community members begin to slowly participate in the driving tour through the various tourism products offered. Furthermore, this community welfare descriptor is supported by multiple elements of the sub-descriptors in Figure 6 below:
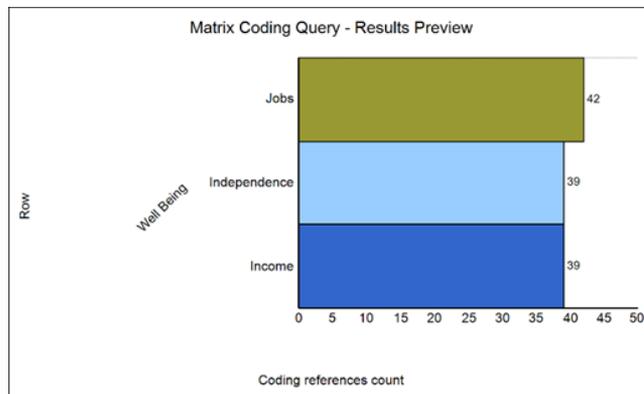

Figure 6. Results of the community welfare descriptor coding matrix

Based on the analysis results in the image above, the first sub-descriptor of the social welfare descriptor is the availability of employment and tourism businesses, with the effects of the coding matrix reaching 42 points. Next is the sub-descriptor of community independence and the impact on income as an element forming community welfare with the same coding matrix results, earning 39 points based on an analysis of the research findings. Thus, the independence needed to achieve community welfare is required to develop community-based tourism in the Mandeh Area. In this context, freedom is how the community independently moves the tourism sector as the leading actor and obtains prosperity from tourism activity. Meanwhile, the impact on income sub-descriptors drives the community to improve welfare when involved as an actor driving community-based tours in the Mandeh Area.

4.1.6 Environmental sustainability descriptor

Next is a descriptor of environmental sustainability as part of the dimension of sustainable tourism. The results of the coding matrix reach 23 points based on an analysis of the research findings. Sustainable community-based tourism is intended as a tool for community development and nature conservation. So, research on this includes comprehensive community development and sustainable tourism in the Mandeh Area. Furthermore, from the results of the coding matrix, several sub-descriptors are elements in the environmental sustainability descriptor, with details in Figure 7 below:
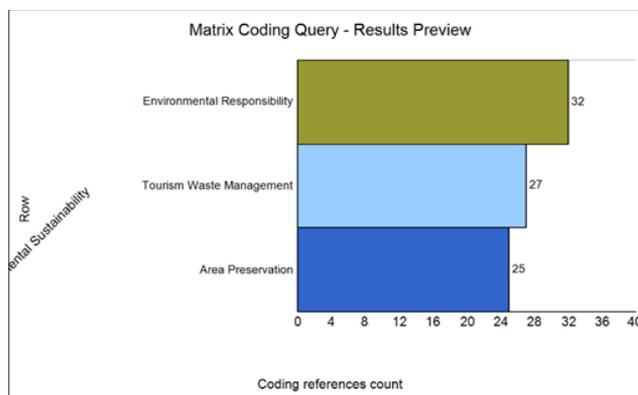

Figure 7. Results of the matrix coding descriptors for environmental conservation

From the coding matrix above results, it can be explained that the first sub-descriptor is environmental responsibility, which reaches a value of 32 points. Meanwhile, tourism waste management is in the following position, with the coding matrix's results getting 27 points. The last sub-descriptor is the preservation of the area, with the effects of the coding matrix reaching a value of 25 points. In preserving the environment, it is necessary to conserve certain regions, such as mangrove forests, coral reefs, and hilly forests, as assets for community-based tourism development around the Mandeh Area. This requires commitment and real action from all stakeholders to ensure that environmental sustainability regulations are in place and that their implementation runs well so that efforts to damage the environment can be minimized.

4.1.7 Sociocultural descriptors

The final descriptor in the dimension of sustainable tourism is socio-culture, with the results of the coding matrix worth 18 points based on an analysis of the research findings. Conceptually, as Sharpley and Telfer [24] stated, the community's local culture can be the main tourist attraction representing knowledge. It can only be used as a show during tourist visits. Irresponsible tourism development in practice can degrade local culture and natural resources. On the other hand, sustainable tourism development can support the conservation of culture and natural heritage and create awareness of its impact on communities, including socio-culture [25]. Furthermore, in more detail, the sociocultural descriptor is divided into several sub-descriptors, as illustrated in Figure 8.

From the coding matrix above results, three sub-descriptors achieve the same score of 21 points at the first trend level. The sub-descriptors are quality of life, cultural preservation, and local wisdom. The latter is local pride with a coding matrix of

19 points. In this context, the focus is on the growth of local pride resulting from community-based tourism development that emphasizes the sociocultural aspects of the Mandeh Area community as a tourist attraction. Furthermore, with so many tourists interested in visiting the Mandeh Area because of their originality and sociocultural uniqueness, it will further foster local pride in the Mandeh Area community towards their sociocultural aspects.
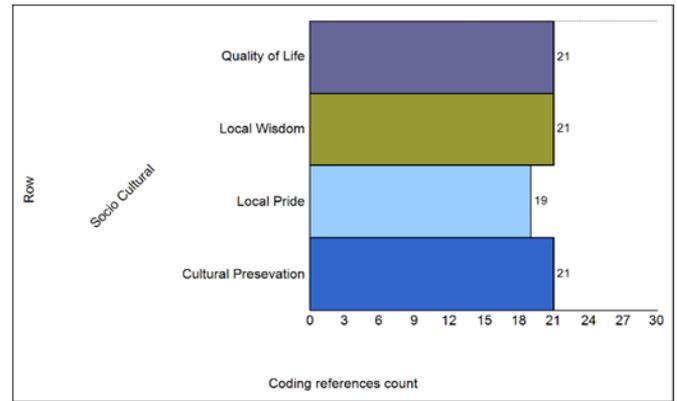

Figure 8. Sociocultural descriptor coding matrix results

4.2 Community-based tourism development model in Mandeh Area

Based on the analysis of the dimensional elements, descriptors, and sub-descriptors that have been done previously, the model of community-based tourism development is modeled based on the project map features in the NVivo 12 Plus application with the following results in Figure 9 below:
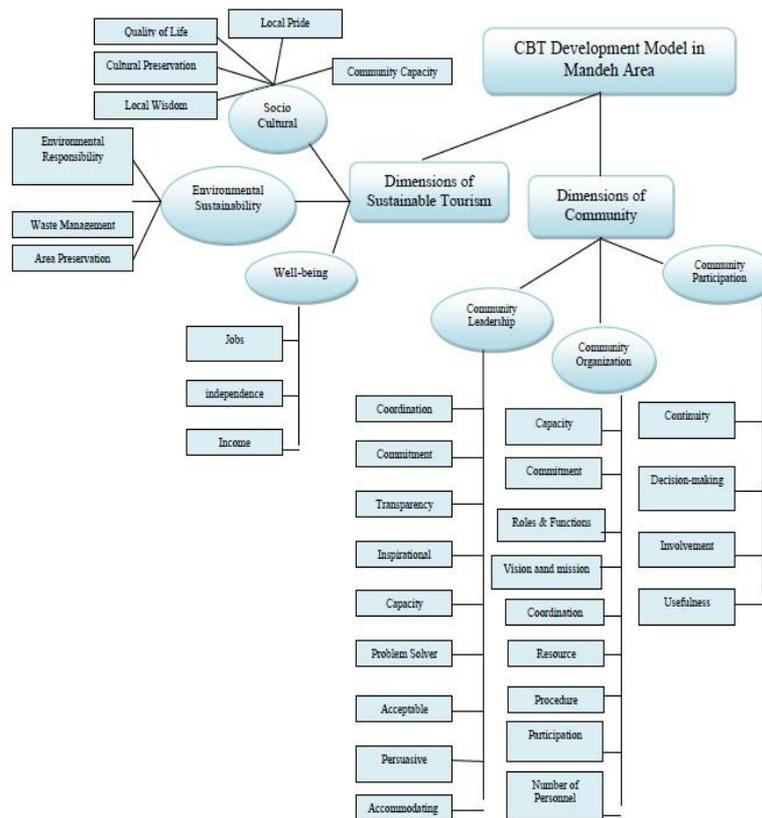

Figure 9. Community-based tourism development model in the Mandeh Area

The model of community-based tourism development in the Mandeh Area, which has been modeled based on the above data analysis, can be explained as follows: The Dimension of Community is one of the central dimensions in community-based tourism development in the Mandeh Area. The community is a subject of tourism development. Therefore, it should be prioritized with the support of stakeholders to be empowered to have a good performance in terms of economic welfare, environmental sustainability, and socio-culture. The community dimension is supported by descriptive elements of community participation as conveyed by Tosun [23] and Wang et al. [26] that high community participation will be more conducive to the evolution of sustainable tourism development. Community descriptor consists of sub-descriptors that are used as supporting elements in community-based tourism development, namely: (1) evaluation of sustainable tourism activities, (2) increasing community participation in the decision-making process, (3) community involvement in increasing the use of tourism in the Mandeh Area.

Meanwhile, the next step is to make a community leadership descriptor, like the second element of building a community-based tourism development model in the Mandeh Area. Leadership focuses on the characteristics and behavior of individual leaders and their relationship with the community/followers [27]. Therefore, the community leadership descriptor is divided into ten sub-descriptors starting sequentially from those that must be considered in the model of community-based tourism development in the Mandeh Area, namely: (1) Improved coordination, (2) Commitment, (3) Transparency, (4) Inspirational leadership, (5) Adequate leadership capacity, (6) Leaders who become problem solvers, (7) Acceptable leaders, (8) Prioritizing persuasive steps and (9) Being accommodating.

And the last one in the community dimension, which is an element in the model of community-based tourism development in the Mandeh Area, is a community organization descriptor that consists of several sub-descriptors that should be considered earlier, namely: (1) organizational capacity, (2) firm commitment organization, (3) there is a division of roles and functions among members of the organization, (4) having a vision and mission within the organization, (5) improving coordination among stakeholders, (6) availability of organizational resources, (7) having organizational procedures, (8) the participation of other stakeholders in strengthening the organization, and (9) an adequate number of organizational personnel.

Meanwhile, sustainable tourism is the element that must be considered in developing community-based tourism in the Mandeh Area. The dimension of sustainable tourism consists of several descriptors developed in the community-based tourism model, starting from the elements that should be considered and strengthened. The first is a descriptor of community welfare which is part of the dimension of sustainable tourism. Conceptually, welfare is a condition where the community can live adequately and develop themselves to properly carry out their social functions [28, 29]. The primary way to improve welfare is to empower the community to have independence and capacity, which is adequate [30]. From the results of the analysis of the research findings, the descriptor of community welfare must be supported by several sub-descriptors, namely: (1) Efforts to provide employment and entrepreneurship, (2) Increase community independence, and (3) Increase the positive impact

of tourism on community income.

Next is a descriptor of environmental sustainability as part of the dimension of sustainable tourism in community-based tourism development in the Mandeh Area. Environmental sustainability in this model is how the community participates in preserving natural resources because the environment is an essential part of tourist attractions. Thus community-based tourism programs support the preservation of natural wealth heritage. Meanwhile, community members recognize the need to conserve and protect nature from further degradation due to tourism activities and outline the need for sustainable use of natural resources, such as beaches, canals, rivers, and so on [15]. Furthermore, environmental conservation descriptors were developed through several sub-descriptors, namely: (1) environmental responsibility, (2) tourism waste management, and (3) area preservation.

And lastly, consider the elements of sociocultural descriptors in building a community-based tourism development model. Conceptually, the sociocultural impact of tourism has been defined by Pizam and Milman [31] as a way in which tourism contributes to value systems, individual behavior, family relationships, collective lifestyles, moral behavior, creative expression, traditional ceremonies, and organizations. Community [32]. For this reason, in community-based tourism development, it is necessary to optimize descriptors from the sociocultural aspect by strengthening the sub-descriptors: (1) local wisdom, (2) cultural preservation, (3) Quality of life, (4) local pride, and (5) community capacity.

From the model of community-based tourism development in the Mandeh Area, products are modeled in the form of relevant draft regulations/policies (attached) that aim to improve the quality of tourism in the Pesisir Selatan Regency in the Mandeh Area. Therefore, the research product is an integral part of the results of this study and is a manifestation of the benefits of the research model that has been modeled.

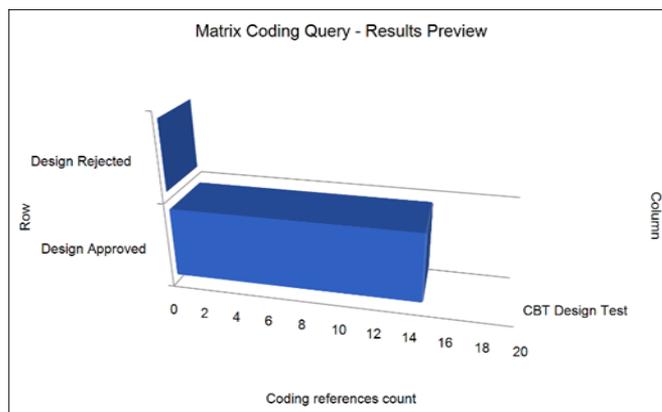## 4.3 Community-based tourism development model test in Mandeh Area

Figure 10. Results of the model test coding matrix

As a basis for accepting community-based tourism development models in the Mandeh Area, it is necessary to test the modeled models. This model test was carried out through focus group discussion activities with participants comprising stakeholders of local governments, village governments, tourism actors, tourism activists/activists, and the community who became informants in this study. After the results of the FGD were conducted, they were processed using the coding of

the answers of the FGD participants, who were the stakeholders. Thus, the test process focuses on the stakeholders' solutions from each dimension in the modeled model. By carrying out the test process using coding in the NVivo 12 Plus application, the model test results can be obtained, which can be seen in Figure 10:

Based on the picture above, it can be explained that from the results of the community-based tourism development model test conducted on 15 FGD participants/research informants, the model was declared approved by the

participants because the results of the analysis were relevant to the conditions and dynamics of tourism in the Mandeh Area. Furthermore, the results of this test also cover the descriptors and sub-descriptors in each dimension. Therefore, they are an integral part of the model of community-based tourism development in the Mandeh Area. Meanwhile, based on the validation of the design test by experts from both academics and practitioners, the community-based tourism development design can be accepted. The details are as follows in Table 3:

Table 3. Expert validation

No	Instrument	Validation Results (A/DA/TBF)	Expert Opinion (Academics)	Expert Opinion (Practitioner)
1	The resulting design already describes integrating three-dimensional concepts in developing community-based tourism.	A	The mapping of stakeholders, communities, and sustainable tourism has been discussed at length in this research. From the analysis and discussion, the role of these three dimensions in the development of community-based tourism has been seen.	As explained, the design of community-based tourism development in the Mandeh Region can apply these three dimensions. The basics are as follows: a) Community participation is needed and can be increased through various empowerment programs. b) Sustainable tourism is the last element that must be considered and strengthened by improving community welfare, conserving resources, and optimizing socio-culture.
2	The resulting design can be an alternative solution to tourism development problems.	A	Unesco has designed a community-based tourism program that covers the three dimensions mentioned in this research. This program is known as Geopark. The results of implementing this concept have been able to prosper the surrounding community while protecting nature and the environment. Currently, 161 regions in the world have implemented this concept. Geopark launched four basic programs and ten focus areas for development. Three focus areas for the development include the community, stakeholder, and sustainable tourism dimensions.	In the 1990s, UNESCO tried to contain a formulation or concept about the importance of utilizing the earth's heritage for local communities' sustainable survival called Geopark. Conceptually, a geopark is an area that has prominent geological elements in which the local community also plays an essential role in protecting this heritage. Therefore, this dimension is one way to develop tourism in the Mandeh Region.
3	The resulting design has novelty compared to the results of previous studies.	A	Mandeh is a West Sumatra coastal area with the character of Minangkabau culture with an egalitarian society. To develop existing tourism potential, it must be done by synergizing all available resources with a local cultural approach. To optimize the best development design, it is necessary to study all related aspects. So far, a similar study has not been carried out comprehensively (with the help of a project map application) to get the best development design, primarily related to the Minangkabau people in coastal areas.	The Mandeh Area is a South Coast coastal area with extraordinary wealth and natural beauty. The role of government and society is needed to develop the existing potential into a quality tourist place. This research develops community-based tourism development that departs from the collaborative dimensions of stakeholder support, community dimensions, and sustainable tourism dimensions. The collaboration of several of these elements changes the novelty of research that can sharpen tourism development following the conditions of the Minangkabau people on the coast/coastal area.

Information: A: Agree; DA: Disagree; TBF: To Be Fixed

Expert academics recommend this research as a scientific reference for developing community-based tourism. Regarding scientific study principles, it is hoped that tourism developers can take compelling and efficient steps to prepare and manage a tourism area. For the development of further studies, global issues such as climate change, disaster mitigation, and gender need to be included in the design of community-based tourism, considering that this issue is also one of the main attractions for international visitors to come to an area. The expert practitioner recommends that this research be used as a reference for local governments, both provincial and district/city to the central government, in making

community-based tourism development policies. The analysis has also elaborated on the community dimensions, and sustainable tourism dimensions so that they will be more effective in tourism development.

5. CONCLUSION

Community dimensions with descriptors, namely community participation, organization, community leadership, and community capacity, can be summarized as follows:

a) Community participation is one of the bases for developing community-based tourism in the Mandeh Region and has a higher tendency than other descriptors. This community participation aims to ensure its members benefit from tourism activities in the Mandeh Area. Part of the benefits of the tourism profits earned are allocated to all community members and not to just a few individuals. From the analysis results, the participation descriptor has a sub-descriptor: the decision-making process, involvement, usefulness, and evaluation of sustainable tourism activities. The highest tendency of this sub-descriptor is the process of decision-making and assessment of sustainable tourism activities.

b) The capacity of the community in the Mandeh Area is one of the elements driving the development of community-based tourism, which needs to be increased so that the quality of tourism itself can also increase.

c) Community leaders are local leaders who influence community-based tourism activities and are pioneers in preserving the environment and acting as a driving force for communities to participate in tourism. These local leaders also become a communication bridge between the community and other stakeholders. From the analysis carried out, it was found that sub descriptors of community leadership were transparency, problem solver, persuasive, coordination, commitment, capacity, inspirational, accommodative, and acceptable. Coordination has the highest value trend, which can be interpreted as the main milestone needed in creating effective community leadership in driving community-based tourism in the Mandeh Area and other sub-descriptors.

d) Community organizations are forums formed to empower the community in developing and managing tourism in the Mandeh Area, both those created based on government legality and those included based on shared ideas and values. The sub-descriptor of this community organization consists of vision and mission, resources, procedures, roles and functions, stakeholder participation, coordination, commitment, organizational capacity, and several personnel. The one that achieves the highest score is organizational capacity, which means that the capacity of community organizations is needed in developing community-based tourism in addition to other sub-descriptors.

The dimensions of sustainable tourism with descriptors are community welfare, environmental sustainability, and socio-culture, which can be explained as follows:

a) Community welfare is the main foundation and very principle of community-based tourism development. Community welfare is one of the drivers of the Mandeh Region community's involvement in the tourism sector in addition to other industries. This community welfare descriptor is supported by several sub-descriptors, namely, the availability of tourism business opportunities, community independence, and the impact on income. The sub-descriptor of the availability of tourism business employment tends to have the highest value, which means it is the main driving force in improving the welfare of the people in the Mandeh Area and the other sub-descriptors.

b) Environmental sustainability is the next descriptor in the dimension of sustainable tourism which consists of several sub-descriptors, namely environmental responsibility, tourism waste management, and area preservation. Environmental responsibility has the highest trend points. Environmental sustainability as the primary basis for developing community-based tourism in the Mandeh Area requires the formation of a sense of responsibility for the environment for all stakeholders, in addition to managing tourism waste and preserving the site.

c) Sociocultural is one of the descriptors in sustainable tourism, consisting of sub-descriptors of quality of life, cultural sustainability, local pride, and wisdom. At the main trend level, there are three sub-descriptors: quality of life, cultural sustainability, and local knowledge. With the same strong tendency, the three descriptors have a strong preference for the development of community-based tourism in the Mandeh Region to attract tourists to improve their welfare, in addition to the sub-descriptor of local pride.

The design of tourism development in the Mandeh Region was built based on a project map based on the coding matrix results on the dimensions, descriptors, and sub-descriptors in this study. From the results of the project map, it can be concluded that building community-based tourism must start by strengthening the community dimension, and finally strengthening the dimensions of sustainable development. Strengthening these three dimensions is also accompanied by strengthening existing descriptors and sub-descriptors so that a comprehensive community-based tourism development design is built in the Mandeh Region. Based on the design test for community-based tourism development in the Mandeh Area, it can be concluded that from the results of an analysis of the answers of the FGD participants/informants who are stakeholders, it can be stated that they accept the tested design because it is relevant to the dynamics and problems currently facing the Mandeh Area.

Based on the conclusions of the analysis of the results and discussion of the research, the researchers formulated recommendations for the development of community-based tourism in the Mandeh Area on the following points:

a) We are ensuring community participation in every process of developing and developing the Mandeh Area as a destination, starting from formulating policies, implementing development, and receiving benefits from tourism development.

b) To support the point above, capacity and capability development is needed, which can be done through training, self-taught learning, and seeing and studying areas that have already advanced in tourism development so that local innovations emerge in finding the best solutions for them.

c) The people of the Mandeh Area determine local leaders who can mobilize all resources to realize the plans that have been prepared and agreed upon.

d) The people of the Mandeh Area agree to form a joint organization to manage the site so that they have a strong bargaining position in determining the direction and policies for the development of the area and can become a forum for fighting for the community to make the tourism area a provider of sustainable welfare.

e) The need to design several policies and programs, especially in strengthening the community for more optimal tourism development in the Mandeh Region. The community must be a subject and not just an object in developing community-based tourism in the Mandeh Region. These policies and programs should strengthen community leadership, community organization, and community participation descriptors.

f) The importance of paying attention to sustainable tourism is to be implemented in the Mandeh Area because it is most relevant and ensures that efforts to achieve community welfare, environmental sustainability, and socio-culture run in a balance to bring significant benefits to them without damaging the environment.

g) For further research, the researcher provides recommendations for the design of community-based tourism development in the Mandeh Area, which is based on the post-positivism research paradigm and gave birth to a new concept so that it can be continued with different methods and approaches, both quantitatively, qualitatively, mixed mode, R & D and others such as hard/soft system method research, strategic planning, and system thinking. With different variations in terms of both approaches and research methods, it will enrich data and information, and recommendations for tourism development in the Mandeh Region and other locations.

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